



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,605	11/24/2003	Nobuyuki Hatasa	01272.020648.	1005
5514	7590	03/10/2006		EXAMINER
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				MARTIN, LAURA E
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8/1

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/718,605	HATASA ET AL.
	Examiner	Art Unit
	Laura E. Martin	2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 23 February 2006.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1,2 and 4-10 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2 and 4-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 November 2003 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

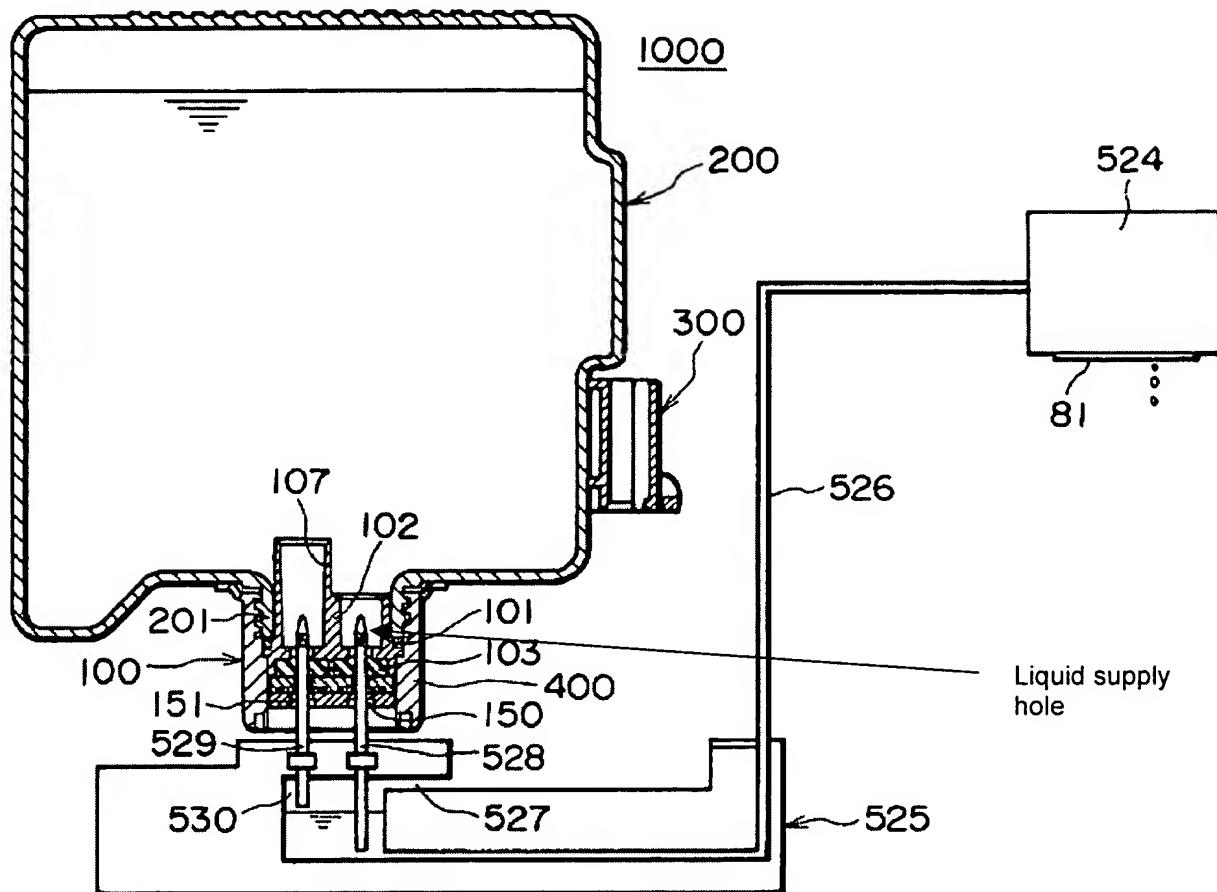
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu et al. (US 2003/0085968).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Shimizu et al. teaches a liquid container storing a liquid (figure 4) that forms a plurality of concentration layers in a static state [0069] and having a supply port (figure 4, element 528) for supplying the liquid to another device, the liquid container comprising: a hollow tubular member (figure 4, element 102) whose one end installed in the liquid container is connected to the supply port; at least one liquid supply hole (figure 4, shown below) formed in the tubular member; and an air introducing port (figure 4, element 529) at a bottom of the tubular member to introduce air into the tubular member; wherein the liquid in the liquid container is introduced into the tubular member through the liquid supply hole and the liquid thus introduced is supplied from the supply port (figure 4, element 528) to another device (figure 4, element 524), and the air introduced into the tubular member through the air introducing port rises as a bubble in the tubular member to agitate the liquid inside the tubular member [0069].



As per claim 4, Shimizu et al. teaches a liquid container, wherein at least one of the liquid supply holes is as large as will allow the bubble introduced from the air introducing port to move therethrough out of the tubular member (the tubes for elements 528 and 529 found in figure 4 are the same size, thus the liquid supply hole could allow the passing of a bubble).

As per claim 7, Shimizu et al. teaches a liquid container, wherein the tubular member (figure 4, element 102), the supply port (figure 4, element 528), and the air introducing port (figure 4, element 529) combine to form a n integral connection unit

removable from the liquid container body (element 100 is the integral unit attached by element 400 in figure 4)

As per claim 8, Shimizu et al. teaches a liquid container, wherein the liquid is pigment ink [0069].

As per claim 9, Shimizu et al. teaches an inkjet printing apparatus [0001] which mounts the liquid container of claim 8 and performs a printing operation by ejecting ink from a printhead onto a print medium [0061], the ink jet recording apparatus comprising: a supply means (figure 4, element 526) for communicating the supply port (figure 4, element 528) with the printhead (figure 4, element 524); wherein the supply means extracts ink from the liquid container and supplies it to the printhead as the ink is consumed by the printhead [0061].

As per claim 10, Shimizu et al. teaches a liquid container wherein the air introducing port (figure 4, element 529) and liquid supply port are located at a bottom of said hollow tubular member (figure 4, element 400).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. (US 2003/0085968) in view of Bailey (US 4159790).

As per claim 2, Shimizu et al. teaches the liquid container of claim 1; however, it does not teach the tubular member extending vertically upward from a bottom of the liquid container to a height almost equal to an inner height of the liquid container and has the liquid supply hole formed therein at a plurality of vertically spaced locations, and the plurality of liquid supply holes each introduce nearby liquid into the tubular member. Shimizu et al. also does not teach the liquid supply holes open in the tubular member in a direction at a predetermined angle to the center axis of the tubular member or the plurality of supply holes are all open at the same angle to the center axis of the tubular member.

Bailey teaches the tubular member (figure 2, element 20) extending vertically upward from a bottom of the liquid container to a height almost equal to an inner height of the liquid container and has the liquid supply hole (figure 2, element 28) formed therein at a plurality of vertically spaced locations, and the plurality of liquid supply holes each introduce nearby liquid into the tubular member (figure 2; column 2, lines 23-28). Bailey also teaches the liquid supply holes open in the tubular member in a direction at a predetermined angle to the center axis of the tubular member or the plurality of supply holes are all open at the same angle to the center axis of the tubular member (in figure 2, all holes, elements 28, appear to be opened at the same angle from the center axis of the tubular member).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Shimizu et al. with the disclosure of Bailey in order to improve ink flow.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, and 4-9 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin



3/6/06  
MANISH S. SHAH  
PRIMARY EXAMINER